that the singular bony enlargements on the posterior face of the sternum and in the bumps or knobs at the sternal edge, as seen in the drawing sent, mark the ultimate development of the trachea; whilst the state of the trachea in the sternum sent by Sir John Richardson to Mr. Yarrell, and which I now assign to *C. Passmori*, may be a less advanced form of the same structure, and those I have since examined may be still younger forms of the same species.

"It may be, indeed, that the specimens since examined are younger specimens of *C. Passmori*, and that the true *C. buccinator* is less common, or at least a more northern form; but I think it right to indicate the doubt which I feel myself respecting the new species, leaving the facts for the consideration of better judges. I thought I followed excellent authority in considering such a difference in the trachea as a sufficient mark of a distinct species; but the facts will not be less interesting to ornithologists if they see reason for using such characters with greater caution in future. At present, I must leave the value of my distinctions as a subject for further inquiry, with as little wish to press an unnecessary specific name as to leave interesting facts unrecorded.

"W. HINCKS."

Description of a new British Annelide, belonging to the Tribe RAPACEA of Grube=Annelida errantia of Milne-Edwards. By W. BAIRD, M.D., F.L.S.

(Plate I.)

[Read April 21, 1864.]

Fam. NEREIDIDÆ.

Gen. HETERONEREIS.

HETERONEREIS SIGNATA, Baird. (Pl. I. figs. 1, 1 a-c.)

Char. Corpus pyramidatum, maculatum, dorso et ventre canaliculatum. Segmenta 2^{ndum}, 3^{rtium}, 4^{tum} et 5^{ntum} brevissima; segmenta sexdecim sequentia magna, pedibus validis, simplicibus; segmenta partis posterioris corporis parva, confertim disposita, pedibus parvis, compositis; cirri pedum anteriorum simplices, non crenati.

Hab, Polperro, Cornwall; in fundo limoso. (Mus. Brit.)

The body of this Annelide (Pl. I. fig. 1) is nearly 3 inches long, consisting of about 106 segments. The anterior portion is

about one-third the whole length and is composed of 21 segments, the posterior containing 85. In form it tapers gradually from the head to the tail, which terminates in a blunt point without cirri. The dorsal surface is beautifully marked with dark-purple spots, which extend over the upper part of the feet, leaving a hollow space in the centre free from them. The anterior portion of the body is convex, the lower flattened. The segments of the anterior part are of considerable size, but those of the lower are small and very much crowded together. A canal runs down the ventral surface the whole length, while a similar one runs down the dorsal surface of the anterior portion only, beginning at the sixth or seventh segment and continuing to the twenty-first. The head is rather small; the first segment of the body of moderate size, and the four succeeding ones very narrow (fig. 1 d), the first nearly equalling the three following. The tentacular cirri are equal in length to about the four first segments. The feet of the anterior portion of the body (fig. 1 a) are all simple lobulated feet, without any foliaceous branchial lamina. The dorsal lobe is short, stout, and rounded at the apex, with a cirrus springing from near its root, about one-third longer than the lobe itself, and not crenated underneath. The ventral lobe is somewhat larger than the dorsal, and the cirrus attached to it is very short, not quite half the length of the lobe. The bristles attached to it are of two kinds: those especially attached to the lobe nearest the dorsal lobe (the superior fascicle) are all slender, compound, with a sharp-pointed smooth style inserted into a stouter cylindrical shaft which is slightly striated (set a spinosa). The bristles of the inferior branch are bifasciculate, and consist of one bundle composed of spinous bristles like those above described, and another composed of stouter and rather shorter setae with a striated slightly bent cylindrical shaft cut obliquely at the tip, to which portion is articulated a short claw-like piece, quite smooth, and slightly bent at the apex (setæ falcatæ). The aciculæ are stout and of a black colour. The posterior feet (fig. 1b) are all much smaller than the anterior, but more complicated in structure. Above the base of the dorsal or superior lobe we find a compressed foliaceous lamella. The superior setiferous tubercle is also furnished with a similar lamina, but very large, extending across the middle lobes of the foot. The ventral cirrus has appended beneath its base another foliaceous lamina of about the same size as that attached to the dorsal lobe. The cirri of these lobes are rather short, that of the dorsal lobe being longer than

the lobe, while the ventral cirrus is shorter than its corresponding lobe. The bristles are of two kinds,—those of the setiferous tubercles being numerous, compound, and consisting of a flattened lancet-shaped blade, smooth and rather sharp-pointed, let into a somewhat cylindrical shaft which is striated half across (*setæ cultratæ*) (fig. 1 c). Mixed with these are a few (about four or five) long and stout setæ of the falcate kind, but much longer and stronger than those of the anterior feet.

The species which approaches nearest to this is the *Heteronereis renalis* of Johnston=*H. arctica* of Oersted. It differs, however, in many respects. The relative size of the first and four succeeding segments, the colour and peculiar markings of the body, the canal running down the centre dorsally and ventrally, the number of anterior segments (in *renalis* or *arctica* being only twenty, while in this species there are twenty-one), the posterior portion of the body being more slender, and the tail destitute of cirri, the structure of the feet and cirri, &c.,—all separate it from that species.

The only specimen which I have seen was found by Mr. Laughrin at Polperro, Cornwall, in a muddy bottom, and is now in the national collection, British Museum.

Description of several new Species and Varieties of Tubicolous Annelides=Tribe LIMIVORA of Grube, in the Collection of the British Museum. By W. BAIRD, M.D., F.L.S.—PART I.

(Plate I.)

[Read April 21, 1864.]

In the extensive collection of Annelides belonging to the British Museum, now in course of arrangement, there is a considerable number which appear to me to be undescribed. In many cases these are difficult to determine, from the fact that soft animals preserved in spirits do not always retain their form and consistence, or may be so hardened by the spirits as to offer great difficulties in making out the different parts. In the case of the Tubicolous Annelides, again, perhaps only the tubes or cases in which the animals dwell have been preserved, and thus it is almost impossible to refer them to their proper genera. As, however, notwithstanding these difficulties, we possess many

